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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,390	12/19/2006	Mattias Johannesson	088834-000000US	5713
20350 7590 11/28/2007 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER			EXAMINER	
			NGUYEN, SANG H	
EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834		ART UNIT	PAPER NUMBER	
			2886	
			MAIL DATE	DELIVERY MODE
			11/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/574,390	JOHANNESSON ET AL.				
Office Action Summary	Examiner	Art Unit				
•	Sang Nguyen	2886				
The MAILING DATE of this communication						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by state of the period for reply will be period for reply	B DATE OF THIS CON R 1.136(a). In no event, however, riod will apply and will expire SI atute, cause the application to b	MMUNICATION.  er, may a reply be timely filed  X (6) MONTHS from the mailing date of this communication.  Decome ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 3	<u>0 March 2006</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ 1	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
• •	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice unde	er Ex parte Quayle, 19	935 C.D. 11, 453 O.G. 213.				
Disposition of Claims		•				
4) Claim(s) 1-16 is/are pending in the applicat						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed. 6) Claim(s) <u>1-16</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction an	id/or election requirem	ient.				
Application Papers		•				
· · ·	oiner.					
9) The specification is objected to by the Exam 10) The drawing(s) filed on is/are: a) □ i		cted to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the cor	rection is required if the	drawing(s) is objected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the	Examiner. Note the a	attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for fore a)⊠ All b)□ Some * c)□ None of:	eign priority under 35 t	J.S.C. § 119(a)-(d) or (f).				
	1.⊠ Certified copies of the priority documents have been received.					
2. Certified copies of the priority docum	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)	۱۰ 🗀 ۱۰	nterview Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	)P	aper No(s)/Mail Date				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/30/06.		lotice of Informal Patent Application Other:				

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#### DETAILED ACTION

## **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

The information disclosure statement (IDS) submitted on 03/30/06 has been entered. The submission is in compliance with the provisions of 37 CFR 1.97.

Accordingly, the information disclosure statement is being considered by the examiner.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over lwata et al (U.S. Patent No. 5,293,538) in view of Mitsuhiro (JP 2003-247952, submitted by applicant).

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Regarding claims 1, 6-7, 11, and 14-15; Iwata et al discloses a measuring system, comprises:

an object (5 of figures 1-6) having at least a first (3 of figures 3B or 6) and a second (4, 2 of figures 3B or 6) layer;

at least one light source (70 of figure 6) arranged to illuminate the object (5 of figure 6) with incident light (94 of figure 7), an imaging sensor (e.g., 38, 44 of figure 6 or image sensor 200 of figure 9) arranged to detect reflected light (figures 6-7) from the object (6 of figure 1A) and to convert the detected light into electrical charges and means for creating a representation of the object (6 of figures 6-7) according to the electrical charges (figure 9, 12, and 23A-23B and col.13 lines 28-46); and

means for comparing (BC and 87 of figure 6) the information to stored information in order to detect defects (6, 8, 9 of figure 6) on the object (5 of figure 6).

Iwata et al discloses all of features of claimed invention except for means for obtaining information on light scattered in the first layer and the second layer of the object from the representation. However, Mitsuhiro teaches that it is known in the art to provide means for (see abstract) obtaining information on light scattered in the first layer (4 of figure 4) and the second layer (2 of figures 5-6) of the object from the representation (figures 1-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method and system of Iwata et al with means for obtaining information on light scattered in the first layer and the second layer of the

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object from the representation as taught by Misuhiro for the purpose of detecting accurately defect in the surface with high contrast.

Regarding claims 2 and 12; Iwata et al discloses the object (5 of figure 22c) is arranged to move in relation to one another in a predefined direction of movement by motor (90, 64 of figure 22c).

Regarding claim 3; Iwata et al discloses the incident light (94 of figures 7 and 22a) is arranged to have limited dispersion in a predefined direction.

Regarding claim 4; Iwata et al discloses the incident light (94 of figures 7 and 22a) is a linear light.

Regarding claims 5 and 13; Iwata et al discloses the system further comprises means for obtaining information on the geometric profile (6-7 and 23a) of the object (5 of figures 6-7 and 23a) from the representation.

Regarding claim 9; Iwata et al discloses the first layer (3 of figure 6) consist of a transparent or semi-transparent material (col.1lines 12-22).

Regarding claim 10; Iwata et al discloses the object (5 of figure 6) is a package wrapped in a protective material. (col.1 lines 15-34)

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over lwata et al and Mitsuhiro as applied to claims 1 and 11 above, and further in view of Takeda et al (U.S. Patent No. 5,936,726).

Regarding claims 8 and 16, Iwata et al Mitsuhiro discloses all of features of claimed invention except for the light source comprises a polarizer arranged to facilitate the distinction between light reflected on the object and scattered light in the object.

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However, Takeda et al teaches that it is known in the art to provide the light source (1 of figure 1) comprises a polarizer (11 of figure 1) arranged to facilitate the distinction between light reflected on the object and scattered light in the object (14 of figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method and system of Iwata et al with the light source comprises a polarizer arranged to facilitate the distinction between light reflected on the object and scattered light in the object as taught by Takeda et al for the purpose of detecting accurately defect in the surface with high contrast.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sui et al (6831742); Meeks et al (6956658) Xu et al (6590656); Goto et al (6734960); Ravid et al (6256093); Yamanaka et al (5278072); Murakami et al (4886975); or Koizumi et al (4460273).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifu Chowdhury can be reached on (571) 272-2800 ext. 86. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 24, 2007

Sang H. Nguyen
Primary Patent Examiner
Art Unit 2886